

## **Influence of the pyrethroid insecticides in ultralow doses on the freshwater invertebrates (*Daphnia magna*)**

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### **Abstract**

It was found previously that micromolar and millimicromolar concentrations of pyrethroids act as toxic agents for terrestrial and water invertebrate organisms. Since these chemicals have a significant neurotoxic effect on the living beings, the determination of the minimal toxic doses for these insecticides is of great importance. In our study we found that ultralow doses of fenvalerate, cypermethrin and deltamethrin (type II pyrethroids) show toxicological effects on the invertebrate *Daphnia magna* in optimal and stress conditions. We showed also that toxic effects of the insecticides used were more pronounced in stress conditions. The theoretical basis for the phenomena is discussed. © by PSP 2005.

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### **Keywords**

Insecticide, Ultralow dose, Water invertebrates